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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/622,334	07/18/2003	Fabio Lucchi	35762	4838

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EXAMINER

BELT, SAMUEL E

ART UNIT	PAPER NUMBER
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3746

DATE MAILED: 01/23/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/622,334

Applicant(s)

LUCCHI, FABIO

Examiner

Samuel E. Belt

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 7, 10-13 and 15 is/are rejected.
- 7) ☒ Claim(s) 4-6, 8, 9 and 14 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Specification

The information disclosure statement (IDS) submitted on 7/11/2003 is acknowledged. Since submission complies with 37 CFR 1.97 and 1.98, the examiner has considered the references listed therein.

Objections

The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is suggested: A cooling system for a high pressure two-stage compressor.

Claim Rejections - 35 USC § 102

18. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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9. Claim 1-3, 7, 10,13,15 are rejected under 35 U.S.C. 102(b) as being anticipated by Lammers (US Patent 5020973).

Lammers discloses an air compressor having a two-stage reciprocating positive displacement compressor unit for compressing air comprising a central body (Fig. 3, item 12), a motor for driving the compressor unit (Fig. 3, item 11), connected to the central body and having a shaft rotating about an axis of rotation, two cylinders connected to the central body and having respective axes (Fig. 3, item 14), two pistons (Fig. 2, items 19 & 20), each inside one of the two cylinders and moving with alternate motion in the cylinder, for compressing the air, driven by the rotary shaft, cooling means comprising at least one first rotary ventilation part driven by the rotary shaft (Fig. 3, item 140), for generating a cooling air flow, wherein the cylinders are opposite one another, the shaft axis of rotation and the axes of the cylinders substantially lie in the same plane. A conveyor element (Fig. 3, item 15) that directs airflow tangentially to the motor and also onto an intermediate cooling part. An intermediate cooling part (Fig. 1, item 16) for cooling the compressed air as it passes from the first cylinder to the second cylinder. An axial fan with an external ring connecting the individual blades (not numbered; However, clearly seen in Fig. 4).

(NOTE: In regards to claim 1, examiner is interpreting “the same plane” as being the vertical plane as seen in Fig. 2, in which the shaft axis of rotation and the axes of the cylinders lie in relation to one another. In regards to claim 15, examiner is interpreting “portable” as being capable of being carried or moved about; as defined by Merriam-Webster’s Online Dictionary.)

Claim 1-3, 11-13, & 15 are rejected under 35 U.S.C. 102(b) as being anticipated by Meece et al. (US Patent 4190402).

Meece et al. disclose an air compressor having a two-stage reciprocating positive displacement compressor unit for compressing air comprising a central body (Fig. 5, item 44), a motor for driving the compressor unit (Fig. 5, item 10), connected to the central body and having a shaft rotating about an axis of rotation, two cylinders connected to the central body and having respective axes (Fig. 2, item 54), two pistons (Fig. 2, item 38), each inside one of the two cylinders and moving with alternate motion in the cylinder, for compressing the air, driven by the rotary shaft, cooling means comprising at least one first rotary ventilation part driven by the rotary shaft (Fig. 2, item 72), for generating a cooling air flow, wherein the cylinders are opposite one another, the shaft axis of rotation and the axes of the cylinders substantially lie in the same plane. A conveyor element (Fig. 2, item 74) that directs airflow onto opposite cylinders and tangentially to the motor. Guide shoes keyed to the pistons, the shoes being made of a fluorocarbon material, which has a low friction coefficient (Fig. 5, item 40 & Column 2 Lines 14-17). An axial fan with an external ring connecting the individual blades (Fig. 2, item 72).

Allowable Subject Matter

Claims 4-6, 8-9,14 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Cromm et al. (US Patent No. 6364632) disclose a compressor with two cylinders.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Samuel E. Belt whose telephone number is (571) 272-7820. The examiner can normally be reached on M-F, 8 - 4:30EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Thorpe can be reached on (571) 272-4444. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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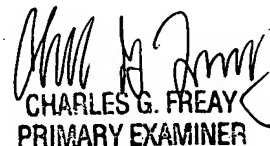
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SEB



Samuel E. Belt

01/10/06



CHARLES G. FREAY
PRIMARY EXAMINER